

Notice of Allowability

Application No.

10/654,427

Examiner

Joseph W. Drodge

Applicant(s)

FUCHIGAMI, YOSHIHARU

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to filing of the Application on 09/04/2003.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 1105.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Art Unit: 1723

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In claim 1, in line 3 -- and producing a waste-water waste product mixture -- has been inserted after "user".

In claim 2, in line 1 "wherein the first sensor is provided with" has been replaced with -- further comprising -- .

In claim 5, in line 3 "the toilet facility" has been replaced with -- a toilet room -- .

Art Unit: 1723

The Abstract has been replaced with the following new Abstract: --

A method and device are provided for treating a waste water waste-product mixture from a toilet by coupling the toilet to a waste product mixture to a waste product holding tank, connecting the tank with a vacuum container having a stirring member for breaking up the waste product and a heating system for drying the waste product to an ash, introducing water from a water holding tank that communicates with the toilet to the ash to form a gel, separating the water from the gel, returning the water to the water holding tank, and discharging the gel residue. --

The following is an examiner's statement of reasons for allowance:

Independent apparatus claim 1 distinguishes in view of recitation of a system that comprises: toilet, 1st user sensor, waste product holding tank with pump, 2nd volume sensor, water holding tank with pump, vacuum container with stirrer and associated with heating system to dry waste product to ash, means for introducing water to the vacuum container and means for separating water from products of the container and returning the separated water to the holding tank, wherein the means for introducing is ***from the water holding tank*** and is ***to ash*** in the vacuum container ***to form a gel***, and the means for separating is of ***the water from the gel***.

The closest prior art is represented by Bennett patent 3,733,617; Roberts patent 4,359,789 and Bigelow et al patent 5,265,544. All three patents concern separating solids from water effluent from a toilet, recirculating water back to the toilet using a system of tanks, solid separating components, pumps and conduits, and treating the solids by maceration, stirring and means for heating.

Bennett also teaches a vacuum container which holds means for stirring, means for heating the solids to generate an ash, means for separating water vapor from the ash by an exhaust system and optionally filters, followed by condensing the vapor and means for pumping such separated and condensed water back to a holding tank from which it is pumped to flush the toilet.

Roberts similarly separates out condensed water vapor from ash product of a heater/incinerator for treating slurry or solid waste from a toilet and recirculating the

Art Unit: 1723

condensed water vapor back to a holding tank where it is pumped back to the toilet; while Bigelow also teaches spraying a mixture of water and solids as a slurry to the top of an incinerator.

However, none of the prior art suggests adding water from the water holding tank that is supplying the toilet to the vacuumized container holding stirrer and heater, adding water by a means operative to form gel from the ash or separating water from such formed gel.

Similarly method claim 5 is distinguished over the prior art and particularly Bennett, Roberts and Bigelow et al by a process corresponding to the apparatus of claim 1 that includes the method step of adding water to a produced solid ash product to form a gel and passing such gel through a strainer to separate the water from gel so as to form a gel residue.

The changes made by Examiners Amendment were all for the purpose of mitigating 112@2 problems concerning inconsistent terminology and antecedent basis and were not intended to change the scope of any claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 1723


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

November 3, 2005


JOSEPH DRODGE
PRIMARY EXAMINER